

# GBJ25005 THRU GBJ2510

## 25 Amp Glass Passivated Bridge Rectifier 50 to 1000 Volts

### Features

- Lead Free Finish/RoHS Compliant (NOTE 1)("P" Suffix designates RoHS Compliant. See ordering information)
- Ideal for printed circuit board
- Low forward voltage drop, high current capability.
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Mounting: Through Hole for #6 Screw
- Recommended Torque: 5.7 cm-kg (5 in-lbs)
- Mounting Torque: 10 cm-kg (8.8 in-lbs) maximum
- Halogen free available upon request by adding suffix "-HF"

### Maximum Ratings

- Operating Temperature: -55°C to +150°C
- Storage Temperature: -55°C to +150°C
- UL Recognized File # E165989

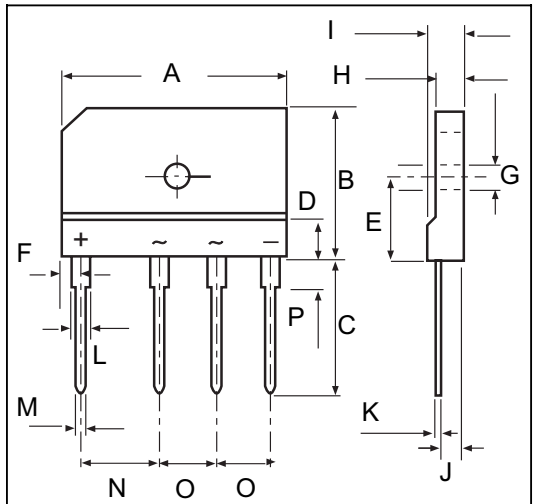
MCC Catalog Number	Device Marking	Maximum Recurrent Peak Reverse Voltage	Maximum RMS Voltage	Maximum DC Blocking Voltage
GBJ25005	GBJ25005	50V	35V	50V
GBJ2501	GBJ2501	100V	70V	100V
GBJ2502	GBJ2502	200V	140V	200V
GBJ2504	GBJ2504	400V	280V	400V
GBJ2506	GBJ2506	600V	420V	600V
GBJ2508	GBJ2508	800V	560V	800V
GBJ2510	GBJ2510	1000V	700V	1000V

### Electrical Characteristics @ 25°C Unless Otherwise Specified

Average Forward Current	$I_{F(AV)}$	25 A	$T_c = 100^\circ\text{C}$
Peak Forward Surge Current	$I_{FSM}$	350A 700A	8.3ms, half sine 1.0ms, half sine
Maximum Instantaneous Forward Voltage	$V_F$	1.0V	$I_{FM} = 12.5\text{ A}$ $T_J = 25^\circ\text{C}$
Maximum DC Reverse Current At Rated DC Blocking Voltage	$I_R$	10 $\mu\text{A}$ 500 $\mu\text{A}$	$T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$
$I^2t$ Rating for Fusing	$I^2t$	510A <sup>2</sup> S	$t < 8.3\text{ms}$
Typical thermal resistance, With heatsink	$R_{\theta J-C}$ $R_{\theta J-A}$	1.4°C/W 5.5°C/W	
Dielectric strength @ terminals to case, AC 1 minute	$V_{dis}$	2KV	
Typical Junction Capacitance	$C_J$	85 pF	Measured at 1.0MHz, $V_R = 4.0\text{V}$

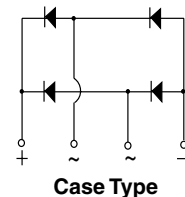
Notes: 1.High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7a

### GBJ



#### DIMENSIONS

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.170	1.190	29.70	30.30	
B	.780	.800	19.70	20.30	
C	.670	.710	17.00	18.00	
D	.019	.019	4.70	4.90	
E	.430	.440	10.80	11.20	
F	.090	.110	2.30	2.70	
G	.120	.130	3.10	3.40	
H	.130	.150	3.40	3.80	
I	.170	.190	4.40	4.80	
J	.100	.110	2.50	2.90	
K	.020	.030	0.60	0.80	
L	.080	.090	2.00	2.40	
M	.040	.040	0.90	1.10	
N	.390	.400	9.80	10.20	
O	.290	.300	7.30	7.70	
P	.150	.170	3.80	4.20	



## Typical Characteristics

FIG.1 - FORWARD CURRENT DERATING CURVE

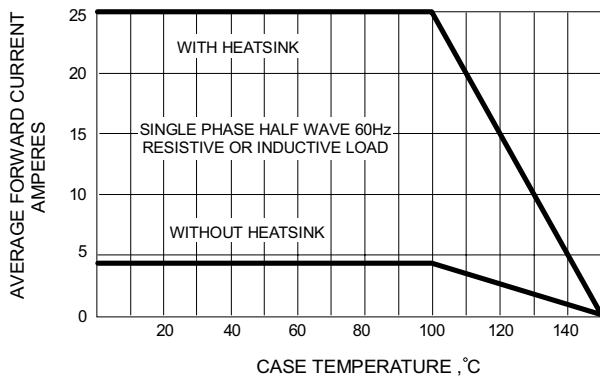


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

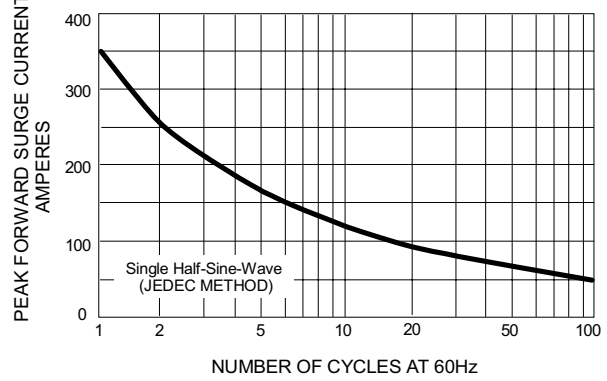


FIG.3 - TYPICAL JUNCTION CAPACITANCE

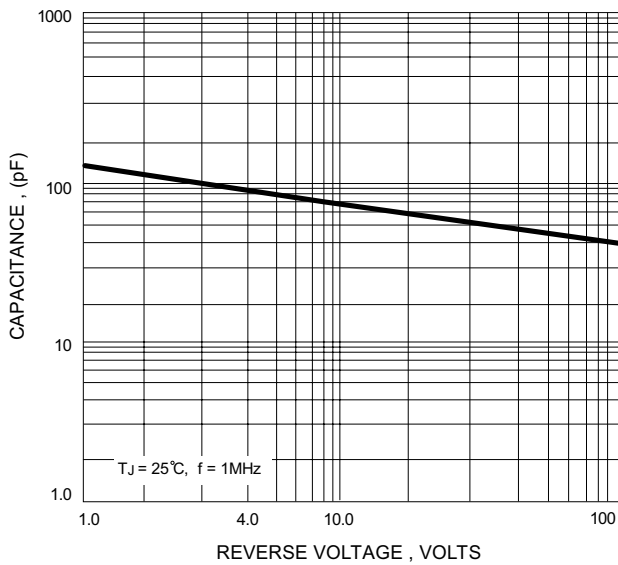


FIG.4 - TYPICAL FORWARD CHARACTERISTICS

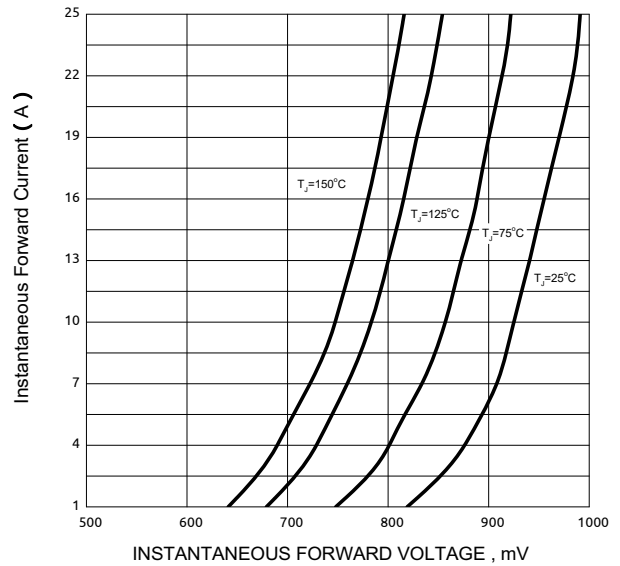
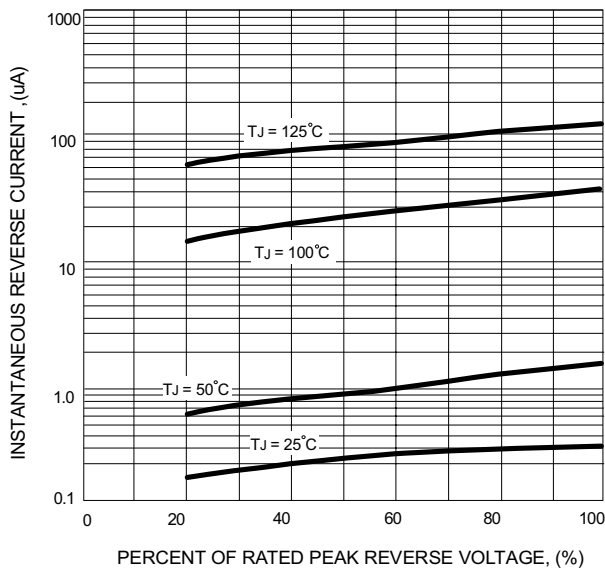


FIG.5 - TYPICAL REVERSE CHARACTERISTICS



**Ordering Information :**

Device	Packing
Part Number-BP	Bulk: 750pcs/Box

Note : Adding "-HF" suffix for halogen free, eg. Part Number-BP-HF

**\*\*\*IMPORTANT NOTICE\*\*\***

**Micro Commercial Components Corp.** reserves the right to make changes without further notice to any product herein to make corrections, modifications , enhancements , improvements , or other changes . **Micro Commercial Components Corp .** does not assume any liability arising out of the application or use of any product described herein; neither does it convey any license under its patent rights ,nor the rights of others . The user of products in such applications shall assume all risks of such use and will agree to hold **Micro Commercial Components Corp .** and all the companies whose products are represented on our website, harmless against all damages.

**\*\*\*LIFE SUPPORT\*\*\***

MCC's products are not authorized for use as critical components in life support devices or systems without the express written approval of Micro Commercial Components Corporation.

**\*\*\*CUSTOMER AWARENESS\*\*\***

Counterfeiting of semiconductor parts is a growing problem in the industry. Micro Commercial Components (MCC) is taking strong measures to protect ourselves and our customers from the proliferation of counterfeit parts. MCC strongly encourages customers to purchase MCC parts either directly from MCC or from Authorized MCC Distributors who are listed by country on our web page cited below. Products customers buy either from MCC directly or from Authorized MCC Distributors are genuine parts, have full traceability, meet MCC's quality standards for handling and storage. **MCC will not provide any warranty coverage or other assistance for parts bought from Unauthorized Sources.** MCC is committed to combat this global problem and encourage our customers to do their part in stopping this practice by buying direct or from authorized distributors.

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- Конкурентоспособные цены и скидки постоянным клиентам.
- Специальные условия для постоянных клиентов.
- Подбор аналогов.
- Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.
- Приемлемые сроки поставки, возможна ускоренная поставка.
- Доставку товара в любую точку России и стран СНГ.
- Комплексную поставку.
- Работу по проектам и поставку образцов.
- Формирование склада под заказчика.
- Сертификаты соответствия на поставляемую продукцию (по желанию клиента).
- Тестирование поставляемой продукции.
- Поставку компонентов, требующих военную и космическую приемку.
- Входной контроль качества.
- Наличие сертификата ISO.

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- Регистрацию проекта у производителя компонентов.
- Техническую поддержку проекта.
- Защиту от снятия компонента с производства.
- Оценку стоимости проекта по компонентам.
- Изготовление тестовой платы монтаж и пусконаладочные работы.



Тел: +7 (812) 336 43 04 (многоканальный)

Email: [org@lifeelectronics.ru](mailto:org@lifeelectronics.ru)